

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Canceled).
2. (Currently Amended) An engine exhaust system for a vehicle, comprising:
at least two flexible couplings having elastic characteristics, positioned at two different locations in the exhaust system, the at least two flexible coupling including an upstream flexible coupling and a downstream flexible coupling;
an upstream component positioned further upstream of the upstream flexible coupling;
a downstream component positioned further downstream of the downstream flexible coupling and mounted to a body of the vehicle;
an intermediate component positioned between the upstream flexible coupling and the downstream flexible coupling and having mass, the intermediate component being coupled to the upstream component via the upstream flexible coupling and coupled to the downstream component via the downstream flexible coupling, the intermediate component being free of direct connections to the body of the vehicle between the upstream and downstream flexible couplings such that the intermediate component freely floats between the upstream and downstream flexible couplings with respect to the body of the vehicle, the intermediate component including a catalyst; and
a dynamic damper formed between the upstream component and the downstream component by virtue of the elastic characteristics and the mass, with the elastic characteristics of the flexible couplings being selected to optimize the resonant frequency of the dynamic damper with respect to the mass of the intermediate component.
3. (Previously Presented) The exhaust system according to claim 2, wherein the mass of the intermediate component is selected to optimize the resonant frequency of the dynamic damper.

4. (Canceled).
5. (Canceled).
6. (Previously Presented) The exhaust system according to claim 2, wherein the upstream flexible coupling is configured and arranged to be closer to an engine than to a muffler, the downstream flexible coupling is configured and arranged to be closer to the muffler than to the engine, and the downstream component is configured and arranged to be positioned between the downstream flexible coupling and the muffler, the downstream component being configured and arranged to be mounted to the body of the vehicle.
7. (Previously Presented) The exhaust system according to claim 2, wherein the upstream flexible coupling has a first elastic characteristic and the downstream flexible coupling has a second elastic characteristic, the first and second elastic characteristics being selected such that a resonant frequency of the section formed by the flexible couplings and the intermediate component is lower than 30Hz.
8. (Previously Presented) The exhaust system according to claim 2, wherein the intermediate component has a mass which is selected such that a resonant frequency of the section formed by the flexible couplings and the intermediate component is lower than 30 Hz.
9. (Canceled).
10. (Currently Amended) An engine exhaust system for a vehicle, comprising:
at least two flexible couplings having elastic characteristics, positioned at two different locations in the exhaust system, the at least two flexible coupling including an upstream flexible coupling and a downstream flexible coupling;
an upstream component positioned further upstream of the upstream flexible coupling;

a downstream component positioned further downstream of the downstream flexible coupling and mounted to a body of the vehicle; and

an intermediate component positioned between the upstream flexible coupling and the downstream flexible coupling and having mass so that a dynamic damper is formed between the upstream component and the downstream component by virtue of the elastic characteristics and the mass, with the elastic characteristics of the flexible couplings being selected to optimize the resonant frequency of the dynamic damper with respect to the mass of the intermediate component,

the intermediate component being coupled to the upstream component via the upstream flexible coupling and coupled to the downstream component via the downstream flexible coupling, the intermediate component being free of direct connections to the body of the vehicle between the upstream and downstream flexible couplings such that the intermediate component freely floats between the upstream and downstream flexible couplings with respect to the body of the vehicle, the intermediate component including a catalyst.

11. (Previously Presented) The engine exhaust system according to claim 10, wherein

the mass of the intermediate component is selected to optimize the resonant frequency of the dynamic damper.

12. (Previously Presented) The engine exhaust system according to claim 10, wherein

each of the upstream flexible coupling and the downstream flexible coupling includes a spherical joint.

13. (Canceled).

14. (Currently Amended) An engine exhaust system for a vehicle having a body, the engine exhaust system comprising:

an upstream flexible coupling having a first elastic characteristic;

a downstream flexible coupling having a second elastic characteristic;
an intermediate component positioned between the upstream flexible coupling and the downstream flexible coupling and having a mass, the intermediate component being free of direct connections to a body of the vehicle between the upstream and downstream flexible couplings such that the intermediate component freely floats between the upstream and downstream flexible couplings with respect to the body of the vehicle, the intermediate component including a catalyst;

an upstream component positioned further upstream of the upstream flexible coupling, the upstream component being coupled to the intermediate component via the upstream flexible coupling; and

a downstream component positioned further downstream of the downstream flexible coupling, the downstream component being coupled to the intermediate component via the downstream flexible coupling, the downstream component being mounted to the body of the vehicle, with the elastic characteristics of the flexible couplings being selected to optimize the resonant frequency of the vibration system with respect to the mass of the intermediate component, with the vibration system being formed of the couplings and the intermediate component between the upstream component and the downstream component.

15. (Previously Presented) The engine exhaust system according to claim 14, wherein

the mass of the intermediate component is selected to optimize the resonant frequency of the vibration system formed of the couplings and the intermediate component.

16. (Previously Presented) The engine exhaust system according to claim 14, wherein

each of the upstream flexible coupling and the downstream flexible coupling includes a spherical joint.

17-20. (Canceled).

21. (Previously Presented) The engine exhaust system according to claim 14,

wherein

the mass of the intermediate component and the elastic characteristics of the flexible couplings are selected to optimize the resonant frequency of the dynamic damper.

22. (Previously Presented) The engine exhaust system according to claim 10,
wherein

the mass of the intermediate component and the elastic characteristics of the flexible couplings are selected to optimize the resonant frequency of the dynamic damper.